

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:
Shuyuan Zhang et al.

Serial No.: 09/203,078

Filed: December 1, 1998

For: METHOD FOR THE PRODUCTION AND
PURIFICATION OF ADENOVIRAL
VECTORS

Group Art Unit: 1648

Examiner: Ali Reza Salimi

Atty. Dkt. No.: INRP:081

Confirmation No.: 3754

CERTIFICATE OF ELECTRONIC SUBMISSION

DATE OF SUBMISSION: November 14, 2006

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MS AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO-1449 be considered by the Examiner and made of record. Copies of the listed documents required by 37 C.F.R. § 1.98(a)(2) are enclosed for the convenience of the Examiner.

In accordance with 37 C.F.R. § 1.97(g), (h), this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made, and is not to be

construed to be an admission that the information cited is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

A fee as set forth in 37 C.F.R. § 1.17(p) in the amount of \$180.00 is enclosed. If an appropriate check has not been enclosed, or if it is insufficient, the Commissioner is authorized to deduct the appropriate fee from Fulbright & Jaworski Account No.: 50-1212/INRP:081.

Applicants respectfully request that the listed documents be made of record in the present case.

Respectfully submitted,



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Attorney for Applicants

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Date: November 14, 2006

Form PTO-1449 (modified)		Atty. Docket No. INRP:081	Serial No. 09/203,078
List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Applicant Shuyuan Zhang <i>et al.</i>	
		Filing Date: December 1, 1998	Group: 1648
U.S. Patent Documents <i>See Page 1</i>	Foreign Patent Documents <i>See Page 1</i>	Other Art <i>See Page 2-4</i>	

U.S. Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Name	Class	Sub Class	Filing Date of App.
	A20	60/026,667	09/25/96	Guillaume <i>et al.</i>			09/25/96
	A21	2002/0045160	04/18/02	Carrion <i>et al.</i>	435	5	06/25/01
	A22	5,670,488	09/23/97	Gregory <i>et al.</i>	514	44	10/13/93
	A23	5,733,720	03/31/98	Olivo	435	5	02/28/95
	A24	5,824,544	10/20/98	Armentano <i>et al.</i>	435	320.1	10/06/95
	A25	5,932,210	08/03/99	Gregory <i>et al.</i>	424	93.2	10/28/97
	A26	5,965,358	10/12/99	Carrion <i>et al.</i>	435	5	08/26/98
	A27	6,143,548	11/07/00	O'Riordan <i>et al.</i>	435	239	06/28/98
	A28	6,194,191	02/27/01	Zhang <i>et al.</i>	435	239	11/20/97
	A29	6,261,823	07/17/01	Tang <i>et al.</i>	435	239	12/11/97
	A30	6,316,185	11/13/01	Saifer <i>et al.</i>	435	5	09/29/99
	A31	6,447,995	09/10/02	Carrion <i>et al.</i>	435	5	10/04/00
	A32	6,726,904	04/27/04	Krauss <i>et al.</i>	424	78.17	10/09/01
	A33	7,125,706	10/24/06	Zhang <i>et al.</i>	435	235.1	06/12/01

Foreign Patent Documents

Exam. Init.	Ref. Des.	Document Number	Date	Country	Language
	B28	WO 00/40702	07/13/00	WIPO	French (English Abstract)
	B29	WO 02/29388	04/11/02	WIPO	English
	B30	WO 99/43843	09/02/99	WIPO	English
	B31	WO 99/54441	10/28/99	WIPO	English

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INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

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Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

Exam. Init.	Ref. Des.	Citation
	C133	Batra <i>et al.</i> , "IkappaBalpha gene transfer is cytotoxic to squamous-cell lung cancer cells and sensitizes them to tumor necrosis factor-alpha-mediated cell death," <i>Am J Respir Cell Mol Biol</i> , 21:238-245, 1999.
	C134	Blackwell <i>et al.</i> , "Retargeting to EGFR enhances adenovirus infection efficiency of squamous cell carcinoma," <i>Arch Otolaryngol Head Neck Surg.</i> , 125:856-863, 1999.
	C135	Butman <i>et al.</i> , "High Sensitivity HPLC Method for Determining Viral Particle Concentration," Presentation, 2000.
	C136	Carrion <i>et al.</i> , "Intrinsic Fluorescence of Adenovirus Type S: A Sensitive Detection Alternative," <i>Molecular Ther.</i> , 3:438, 2001.
	C137	Chillon <i>et al.</i> , "Group D Adenoviruses Infect Primary Central Nervous System Cells More Efficiently than Those from Group C," <i>J Virol</i> , 73:2537-2540, 1990.
	C138	Chroboczek <i>et al.</i> , "The Sequence of the Genome of Adenovirus Type 5 and Its Comparison with the Genome of Adenovirus Type 2," <i>Virology</i> , 186:280-285, 1992.
	C139	Cristiano <i>et al.</i> , "Viral and nonviral gene delivery vectors for cancer gene therapy," <i>Cancer Detect Prev</i> , 22:445-454, 1998.
	C140	Dorai <i>et al.</i> , "A recombinant defective adenoviral agent expressing anti-bcl-2 ribozyme promotes apoptosis of bcl-2-expressing human prostate cancer cells," <i>Int J Cancer</i> , 82:846-852, 1999.
	C141	Feldman <i>et al.</i> , "Perspectives of arterial gene therapy for the prevention of restenosis," <i>Cardiovasc Res.</i> , 32:194-204, 1996.
	C142	Graham and Prevec, "Methods for construction of adenovirus vectors," <i>Mol. Biotechnol.</i> , 3:207-220, 1995.
	C143	Hermens and Verhaagen, "Viral vectors, tools for gene transfer in the nervous system," <i>Prog. Neurobiol.</i> , 55:399-432, 1998.
	C144	Hurwitz <i>et al.</i> , "Suicide Gene Therapy for Treatment of Retinoblastoma in a Murine Model," <i>Human Gene Therapy</i> , 10:441-448, 1999.
	C145	Irie <i>et al.</i> , "Therapeutic efficacy of an adenovirus-mediated anti-H-ras ribozyme in experimental bladder cancer," <i>Antisense Nucleic Acid Drug Dev</i> , 9:341-349, 1999.

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	C146	Ishibashi <i>et al.</i> , "Hypercholesterolemia in low density lipoprotein receptor knockout mice and its reversal by adenovirus-mediated gene delivery," <i>J. Clin Invest.</i> , 92:883-893, 1993.
	C147	Jardon and Garnier, "PH, pCO ₂ , and temperature effect on R-adenovirus production," <i>Biotechnol. Prog.</i> , 19:202-208, 2003.
	C148	Jiang <i>et al.</i> , "The melanoma differentiation associated gene mda-7 suppresses cancer cell growth," <i>Proc Nat'l Acad Sci USA</i> , 93:9160-9165, 1996.
	C149	Lesch, "Gene transfer to the brain: emerging therapeutic strategy in psychiatry?," <i>Biol. Psychiatry</i> , 45:247-253, 1999.
	C150	Marienfild <i>et al.</i> , "Autoreplication' of the vector genome in recombinant adenoviral vectors with different E1 region deletions and transgenes," <i>Gene Ther.</i> , 6:1101-1113, 1999.
	C151	Mincheff <i>et al.</i> , "Naked DNA and adenoviral immunizations for immunotherapy of prostate cancer: a phase I/II clinical trial," <i>Eur. Urol.</i> , 38:208-217, 2000.
	C152	Morrison <i>et al.</i> , "Complete DNA sequence of canine adenovirus type 1," <i>J. Gen Virol.</i> , 78:873-878, 1997.
	C153	Murakami <i>et al.</i> , "Quantitation of adenovirus DNA and virus particles with the PicoGreen fluorescent Dye," <i>Analytical Biochemistry</i> , 274:283-288, 1999.
	C154	Parks <i>et al.</i> , "A helper-dependent system for adenovirus vector production helps define a lower limit for efficient DNA packaging," <i>J Virol.</i> , 71:3293-3298, 1997.
	C155	Petrof, "Respiratory muscles as a target for adenovirus-mediated gene therapy," <i>Eur. Respir J.</i> , 11:492-497, 1998.
	C156	Reddy <i>et al.</i> , "Nucleotide sequence and transcription map of porcine adenovirus type 3," <i>Virology</i> , 251:414-426, 1998.
	C157	Robbins and Ghivizzani, "Viral vectors for gene therapy," <i>Pharmacol. Ther.</i> , 80:35-47, 1998.
	C158	Robbins <i>et al.</i> , "Viral vectors for gene therapy," <i>Trends Biotechnol.</i> , 16:35-40, 1998.
	C159	Stewart <i>et al.</i> , "Adenovector-mediated gene delivery of interleukin-2 in metastatic breast cancer and melanoma: results of a phase I clinical trial," <i>Gene Ther.</i> , 6:350-363, 1999.
	C160	Vanderkwaak and Alvarez, "Immune directed therapy for ovarian carcinoma," <i>Curr. Opin Obstet Gynecol.</i> , 11:29-34, 1999.

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	C161	Wilson, "Vehicles for gene therapy," <i>Nature</i> , 365: 691-692, 1993.
	C162	Wilson, "When Bad Gene Transfer is Good," <i>J. Clin. Invest.</i> , 98:2435, 1996.
	C163	Yotnda <i>et al.</i> , "Efficient infection of primitive hematopoietic stem cells by modified adenovirus," <i>Gene Ther.</i> , 8:930-937, 2001.
	C164	Zheng <i>et al.</i> , "Transcription units of E1a, E1b and pIX regions of bovine adenovirus type 3," <i>J. Gen. Virol.</i> , 80:1735-1742, 1999.

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